

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**LISTING OF CLAIMS:**

1. (Currently Amended) An isolated polypeptide molecule capable of: (a) binding selected from the group consisting of:

a) a polypeptide consisting of the amino acid sequence of SEQ ID NO:17;

b) a polypeptide consisting of the amino acid sequence of SEQ ID NO:17 and having 1-5 conservative amino acid substitutions; and

c) a polypeptide consisting of the amino acid sequence of SEQ ID NO:17 and having 1-4 additional amino acid residues at the amino- terminus and/or carboxy-terminus,

wherein the polypeptide binds to a region of transferrin that is recognized by a bacterial transferrin binding protein B (TbpB) ; and (b) eliciting an antibody to said bacterial transferrin binding protein.

2. (Currently Amended) The polypeptide molecule of claim 1 wherein the polypeptide molecule is an antibody.

3. (Canceled)

4. (Currently Amended) The polypeptide molecule of claim 1 wherein the transferrin is human transferrin, and the ~~transferrin binding protein is a~~ transferrin binding protein B (TbpB) is from a human Gram negative bacterial pathogen.

5. (Withdrawn) The molecule of claim 1 wherein the region of transferrin comprises a sequence selected from the group consisting of SEQ ID NOs:1-14.

6. (Canceled)

7. (Canceled)
8. (Currently Amended) A vaccine comprising a polypeptide of claim 1 ~~the molecule of any of claims 1-5, or the peptide of claim 6 or claim 7.~~
9. (Previously Presented) The vaccine of claim 8 capable of eliciting antibodies that recognize a plurality of different transferrin binding proteins.
10. (Previously Presented) The vaccine of claim 8 capable of eliciting antibodies that recognize at least two transferrin binding proteins of Gram negative bacteria.
11. (Previously Presented) The vaccine of claim 8 capable of eliciting antibodies that recognize at least two transferrin binding proteins selected from the group consisting of transferrin binding proteins of *Neisseria* spp., *Haemophilus* spp., *Moraxella* spp., *Mannheimia* (*Pasteurella*) spp., *Actinobacillus* spp., and *Staphylococcus* spp.
12. (Previously Presented) The vaccine of claim 8 capable of eliciting antibodies that recognize at least two transferrin binding proteins selected from the group consisting of transferrin binding proteins of *N. meningitidis*, *H. influenzae*, *M. catarrhalis* and *S. pneumoniae*.
13. (Previously Presented) The vaccine of claim 8 capable of eliciting antibodies that recognize the transferrin binding proteins of *H. influenzae* and *M. catarrhalis*.
14. (Previously Presented) The vaccine of claim 8 capable of eliciting antibodies that recognize the transferrin binding proteins of *N. meningitidis* and *H. influenzae*.
15. (Withdrawn) An isolated antibody, or a fragment thereof, wherein the antibody recognizes a plurality of different transferrin binding proteins.

16. (Withdrawn) The antibody or fragment of antibody of claim 15, wherein the antibody is monoclonal.
17. (Withdrawn) The antibody or fragment of antibody of claim 15, wherein the antibody is polyclonal.
18. (Withdrawn) The antibody or fragment of antibody of claim 15, wherein the antibody recognizes at least two transferrin binding proteins selected from the group consisting of transferrin binding proteins of *Neisseria* spp., *Haemophilus* spp., *Moraxella* spp., *Mannheimia* (*Pasteurella*) spp., *Actinobacillus* spp., and *Staphylococcus* spp.
19. (Withdrawn) The antibody or fragment of antibody of claim 15, wherein the antibody recognizes at least two transferrin binding proteins selected from the group consisting of transferrin binding proteins of *N. meningitidis*, *H. influenzae*, *M. catarrhalis* and *S. pneumoniae*.
20. (Withdrawn) The antibody or fragment of antibody of claim 15, wherein the antibody recognizes the transferrin binding proteins of *H. influenzae*, *M. catarrhalis* and *S. pneumoniae*.
21. (Withdrawn) The antibody or fragment of antibody of claim 15, wherein the antibody recognizes the transferrin binding proteins of *N. meningitidis*, *H. influenzae*, and *S. pneumoniae*.
22. (Withdrawn) A method of identifying a transferrin-binding determinant in a transferrin binding protein, comprising: (a) providing an overlapping peptide library corresponding to the transferrin binding protein; (b) determining the activity of each member of the peptide library to bind transferrin; and (c) identifying overlapping amino acid sequences shared by at least two binding members of the peptide library as transferrin-binding determinants.

23. (Withdrawn) The method of claim 22 useful for the identification of conserved transferrin-binding determinants, wherein the method further comprises: (d) determining the activity of the transferrin-binding determinants of (c) in eliciting antibodies that cross-react with a plurality of different transferrin binding proteins; and (e) identifying the transferrin-binding determinants that can elicit cross-reactive antibodies as conserved transferrin-binding determinants.

24. (Withdrawn) A method for preventing or treating a bacterial infection in a mammal, comprising administering to the mammal an effective amount of the molecule of any of claims 1-5, or the peptide of claim 6 or claim 7.

25. (Withdrawn) A method for preventing or treating a bacterial infection in a mammal, comprising administering to the mammal an effective amount of an antibody that specifically recognizes the molecule of any of claims 1-5, or the peptide of claim 6 or claim 7.

26. (Withdrawn) The method of claim 24 or 25 wherein the bacterial infection is associated with a bacterium selected from the group consisting of *Neisseria* spp., *Haemophilus* spp., *Moraxella* spp., *Mannheimia* (*Pasteurella*) spp., *Actinobacillus* spp., and *Staphylococcus* spp.

27. (Withdrawn) The method of claim 24 or 25 wherein the bacterial infection is associated with bacterial meningitis or otitis media..